

**BEFORE THE TENNESSEE REGULATORY AUTHORITY  
NASHVILLE, TENNESSEE**

**NOVEMBER 18, 1999**

<b>IN RE:</b>	)	
	)	
<b>UNITED CITIES GAS COMPANY WEATHER NORMALIZATION ADJUSTMENT AUDIT</b>	)	<b>DOCKET NO. 99-00512</b>
	)	
	)	

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**ORDER ADOPTING WNA AUDIT REPORT OF AUTHORITY'S STAFF**

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This matter came before the Tennessee Regulatory Authority (the "Authority") at a regularly scheduled Authority Conference held on September 28, 1999, for the consideration of the audit findings of the Authority's Energy and Water Division (the "Staff") after review of United Cities Gas Company's ("UCG") Weather Normalization Adjustment (WNA) for the period November 1, 1998 through April 30, 1999. The WNA Audit Report, attached hereto as Exhibit A, contains the audit findings of the Staff, the responses thereto of UCG, and the recommendations of the Staff in addressing its findings. The difference between UCG's Weather Normalization Adjustment and the Staff's audit results is a net under-collection of \$2,018. UCG will include this under-collection in its next Refund Due Customers filing with the Authority.

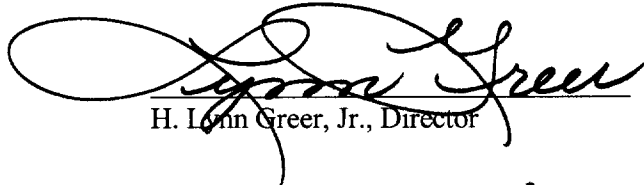
After consideration of the WNA Audit Report, the Authority unanimously approved the findings and recommendations contained therein.

**IT IS THEREFORE ORDERED THAT:**

1. The WNA Audit Report is approved, including the findings and recommendations contained therein.


2. Any party aggrieved by the Authority's decision in this matter may file a Petition for Reconsideration with the Authority within ten (10) days from the date of this Order.

  
Melvin J. Malone, Chairman

  
H. Lynn Greer, Jr., Director

  
Sara Kyle, Director

ATTEST:

  
K. David Waddell, Executive Secretary

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BEFORE THE TENNESSEE REGULATORY AUTHORITY

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EXECUTIVE SECRETARY

NASHVILLE, TENNESSEE

EXECUTIVE SECRETARY

September 14, 1999

IN RE:

UNITED CITIES GAS COMPANY

WEATHER NORMALIZATION ADJ. (WNA) AUDIT )

)

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) Docket No. 99-00512

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**NOTICE OF FILING BY ENERGY AND WATER DIVISION OF THE  
TENNESSEE REGULATORY AUTHORITY**

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Pursuant to Tenn. Code Ann. §§ 65-4-104, 65-4-111 and 65-3-108, the Energy and Water Division of the Tennessee Regulatory Authority (the "Energy and Water Division") hereby gives notice of its filing of the United Cities Gas Company WNA Audit Report in this docket and would respectfully state as follows:

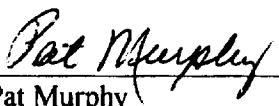
1. The present docket was opened by the Authority to hear matters arising out of the audit of United Cities Gas Company (the "Company").
2. The Company's WNA filings were received on November 1, 1998, through April 30, 1999, and the Staff completed its audit of same on August 27, 1999.
3. On August 27, 1999, the Energy and Water Division issued its preliminary ACA audit findings to the Company, and on September 13, 1999, the Company responded thereto.
4. The preliminary WNA audit report was modified to reflect the Company's responses and a final WNA audit report (the "Report") resulted therefrom. The Report is

**FILE**

attached hereto as Exhibit A and is fully incorporated herein by this reference. The Report contains the audit findings of the Energy and Water Division, the Company's responses thereto and the recommendations of the Energy and Water Division in connection therewith.

5. The Energy and Water Division hereby files its Report with the Tennessee Regulatory Authority for deposit as a public record and approval of the recommendations and findings contained therein.

Respectfully Submitted:

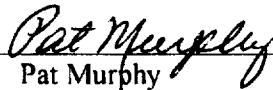
  
\_\_\_\_\_  
Pat Murphy  
Energy and Water Division of the  
Tennessee Regulatory Authority

**CERTIFICATE OF SERVICE**

I hereby certify that on this 14th day of September, 1999, a true and exact copy of the foregoing has been either hand-delivered or delivered via U.S. Mail, postage pre-paid, to the following persons:

Mr. K. David Waddell  
Executive Secretary  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, TN 37243

Mr. Mark Thessin  
Vice President of Rates and Regulatory Affairs  
United Cities Gas Company  
810 Crescent Centre, Suite 600  
Franklin, TN 37067-6226

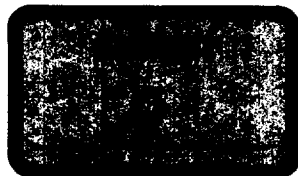
  
Pat Murphy

COMPLIANCE AUDIT REPORT  
OF  
**UNITED CITIES GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

PREPARED BY  
**TENNESSEE REGULATORY AUTHORITY**

ENERGY AND WATER DIVISION

SEPTEMBER, 1999



**COMPLIANCE AUDIT**  
**UNITED CITIES GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

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**COMPLIANCE AUDIT**  
**UNITED CITIES GAS COMPANY**  
**WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

**I. OBJECTIVE OF AUDIT**

In its September 26, 1991, Order in Docket 91-01712, the Tennessee Regulatory Authority (TRA), formerly the Tennessee Public Service Commission, approved a three year experimental Weather Normalization Adjustment (WNA) Rider to be applied to residential and commercial customers' bills during the months of October through May of each year (See Attachment 1). In its June 21, 1994, order, the Commission adopted the WNA Rider as a permanent rule, to be applied November through April of each year for United Cities Gas Company. The purpose of this audit is to determine if the WNA rider was calculated and applied to customers' bills correctly between November 1, 1998 and April 30, 1999.

**II. SCOPE OF AUDIT**

In meeting the objective of the audit, the Staff compared the following on a daily basis:

- 1) The Company's actual heating degree days to National Oceanic and Atmospheric Administration (NOAA) actual heating degree days;
- 2) The Company's normal heating degree days to the normal heating degree days calculated in the last rate case; and
- 3) The Company's calculation of the WNA factor to Staff's calculation. The Staff also audited a sample of customers' bills during the WNA period to verify that the WNA factor had been correctly applied to the bills.

This audit was conducted by Pat Murphy and Butch Phillips of the Energy and Water Division.

**III. BACKGROUND OF WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER**

In setting rates, the Tennessee Regulatory Authority uses a normalized level of revenues and expenses for a test year, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. Use of normalized operating levels eliminates unusual fluctuations that may occur during the test period, which causes rates to be set too high or too low.

Specifically, one part of normalizing revenues consists of either increasing or decreasing the test year weather related sales volumes to reflect the difference between the normal and actual heating degree days. (A heating degree day is calculated as the difference in the average daily temperature and 65 degrees Fahrenheit.) This average daily temperature constitutes normal weather and is determined based on the previous thirty years weather data.



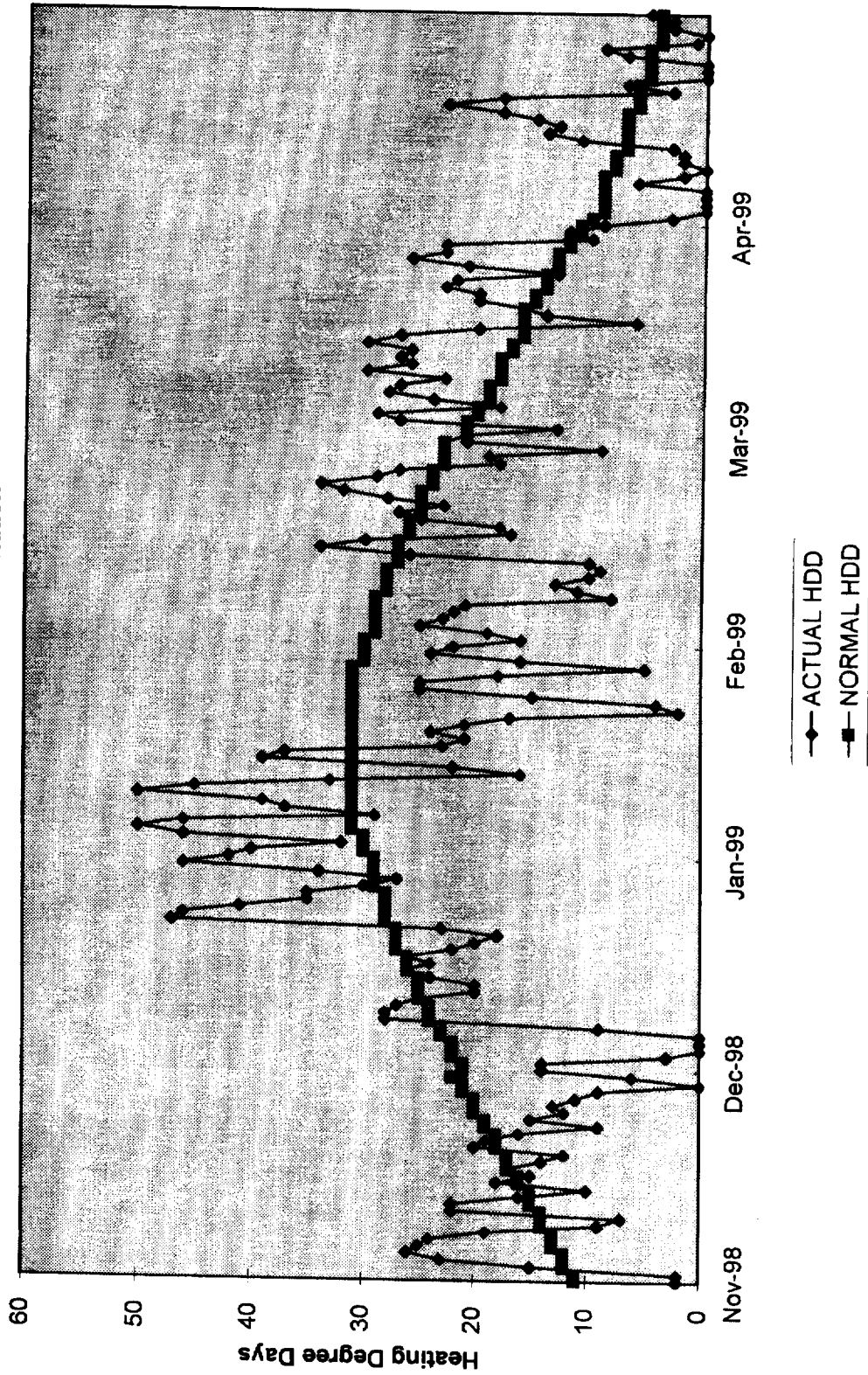
However, normal weather rarely occurs. This has two impacts:

- 1) The customers' bills fluctuate dramatically due to changes in weather from month to month.
- 2) The gas companies earn more or less than their authorized rate of return. For example, if weather is colder than normal, then more gas than anticipated in the rate case will be sold. This results in higher customer bills and overearnings for the company. On the other hand, if weather is warmer than normal, less gas than anticipated in the rate case will be sold, the customers' bills will be lower and the company will underearn.

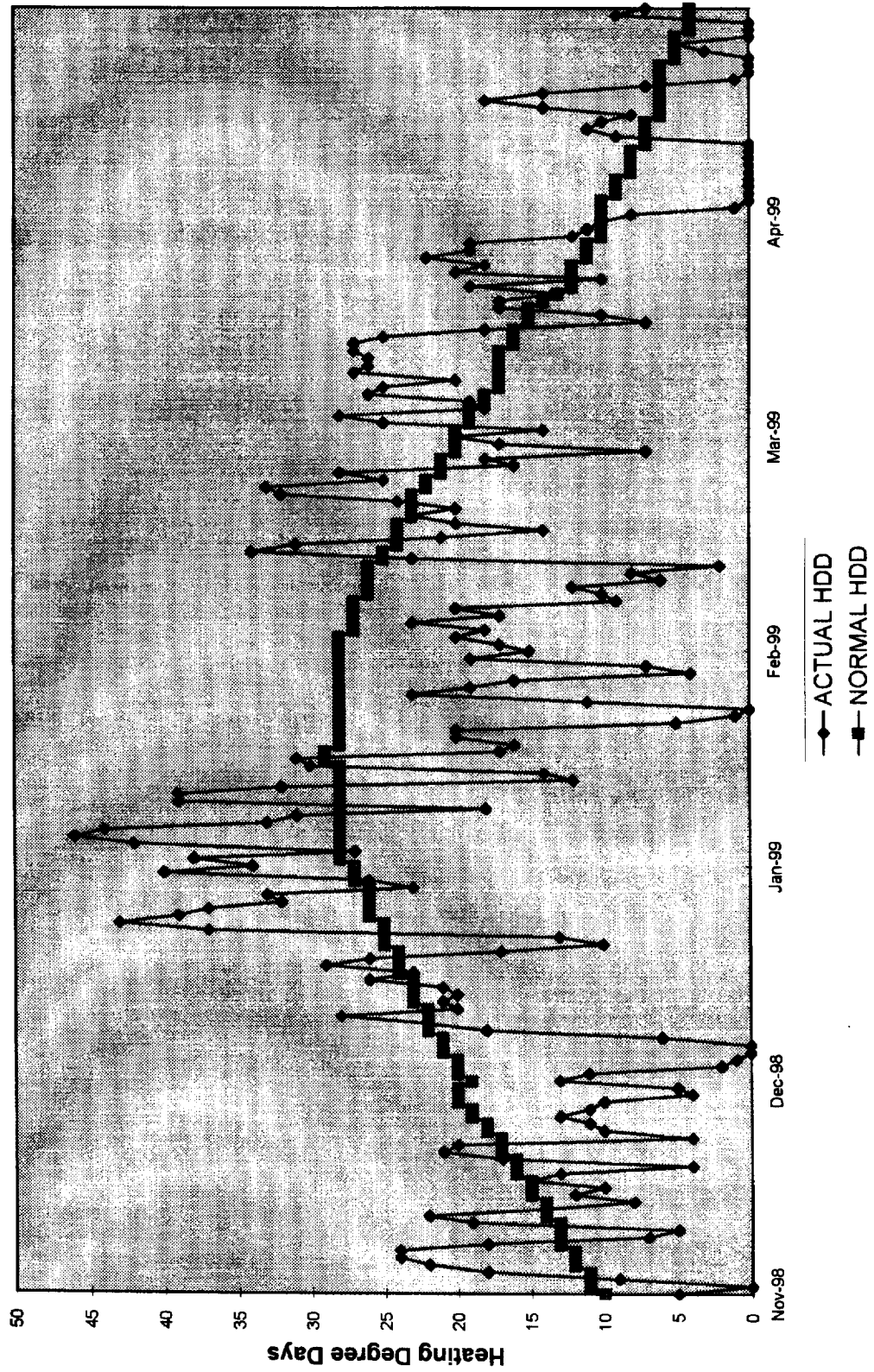
In recognition of this fact, the TRA approved an experimental WNA mechanism, which became permanent on June 21, 1994, to reduce the impact abnormal weather has on the customers' bills and on the gas utilities' operations. In periods of weather colder than normal, the customer receives a credit on his bill, while in periods of warmer than normal weather, the customer is billed a surcharge. Thus, customers' monthly bills should not fluctuate as dramatically and the gas company should have a more stable rate of return.

The following graphs show a comparison of actual heating degree days to normal heating degree days for United Cities Gas during the 1998 - 1999 heating season, in each of its four service areas.

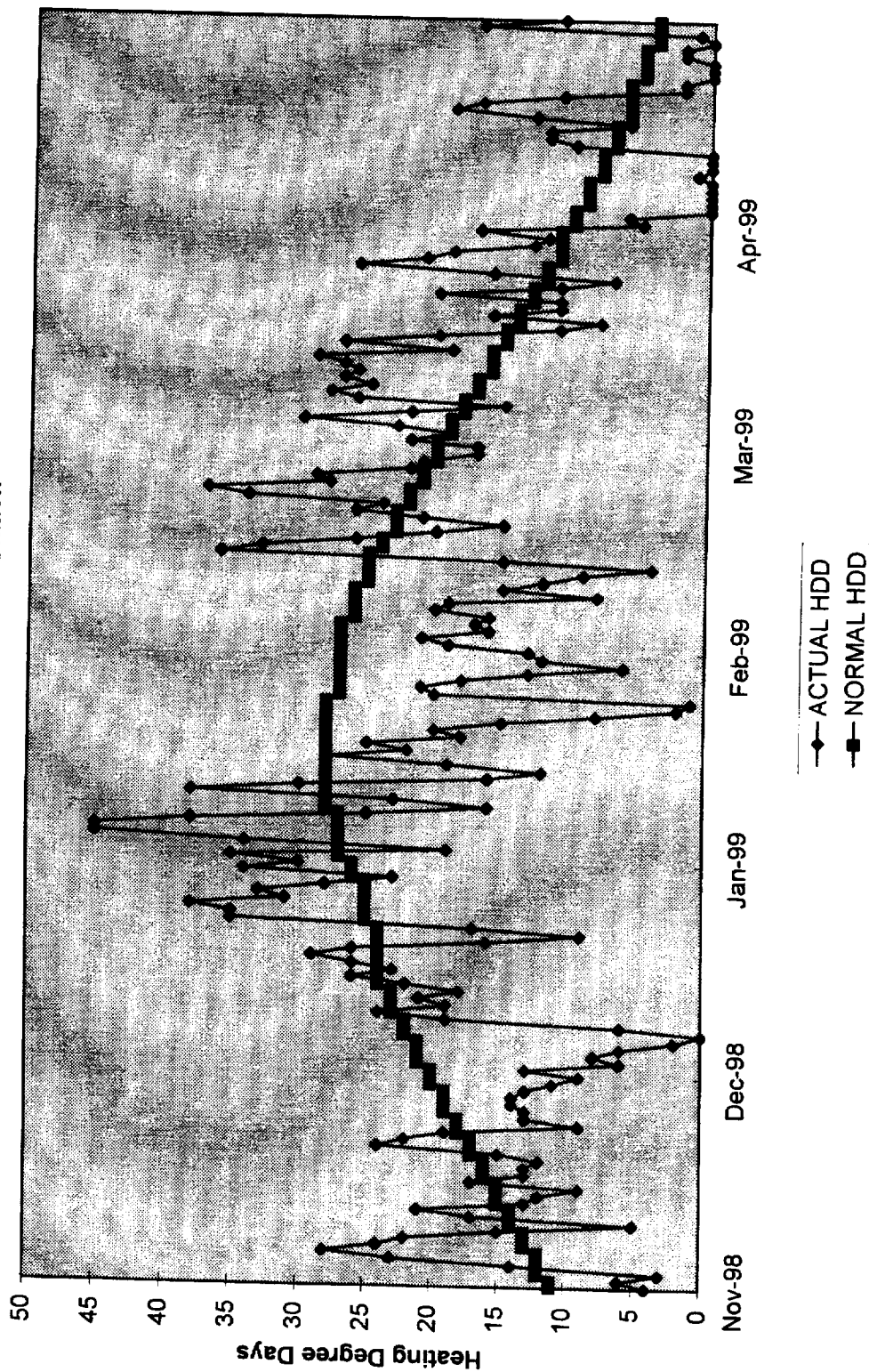
**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Paducah Weather Station**



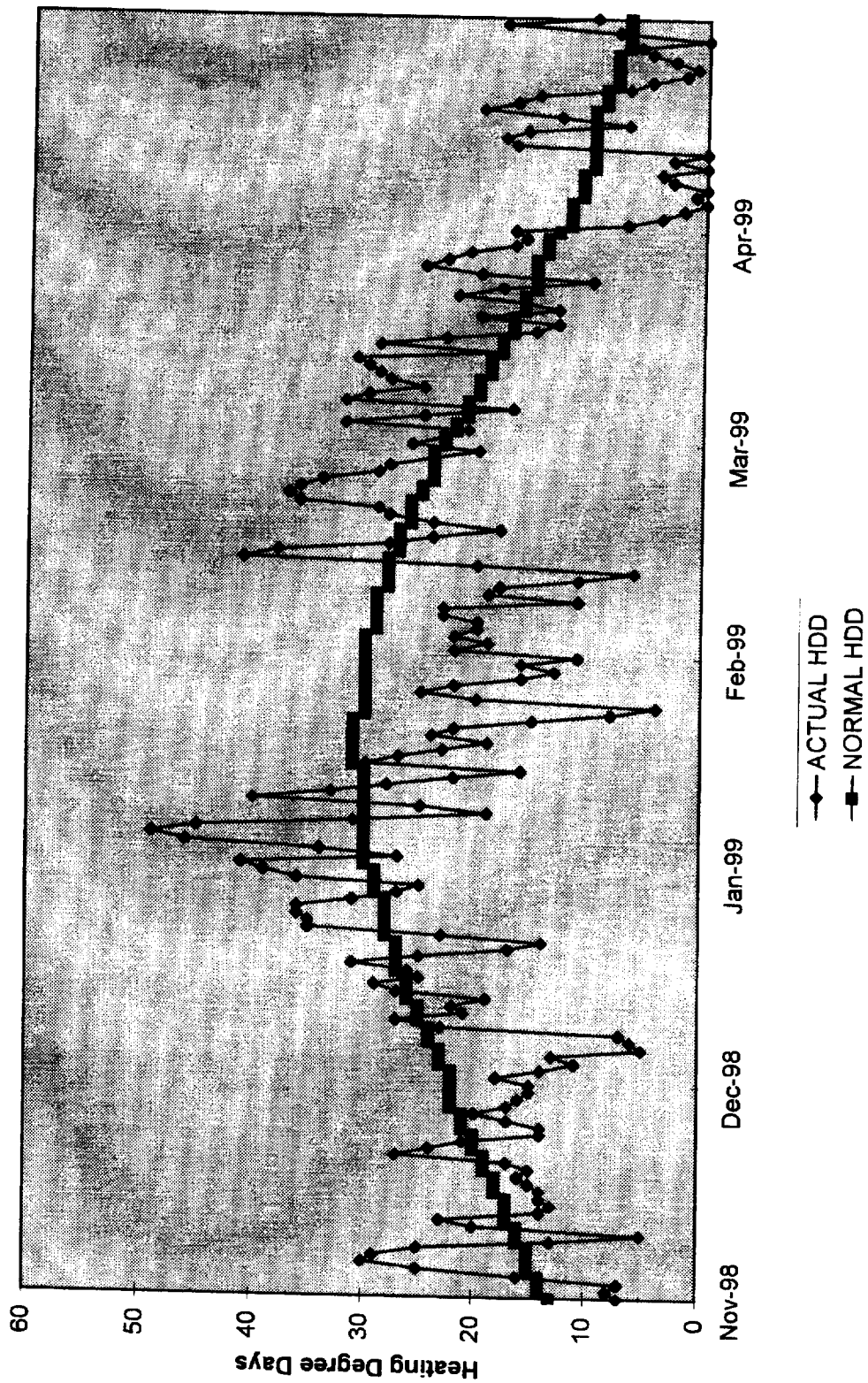
**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Nashville Weather Station**



**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Knoxville Weather Station**



**United Cities Gas Company**  
**Comparison of Actual to Normal Heating Degree Days**  
**Bristol Weather Station**



#### IV. IMPACT OF WNA RIDER

The net impact of the WNA Rider during the November 1, 1998 through April 30, 1999 period was that residential and commercial customers were **surcharged** \$1,451,572 and \$687,328 respectively. This equates to increases in revenues from residential and commercial sales of 5.92% and 1.89% respectively. (See Table 1) This is up from the previous year when the residential and commercial customers were **surcharged** \$341,642 and \$160,542 respectively. (See Table 2)

Table 1

##### **Impact of WNA Rider on Residential & Commercial Revenues November 1, 1998 - April 30, 1999**

	<u>WNA Rider Revenues</u>	<u>Total Revenues</u>	<u>Percentage Impact of WNA Rider On Revenues</u>
Residential Sale	\$1,451,572	\$24,527,787	5.92%
Commercial Sales	<u>687,328</u>	<u>36,314,778</u>	1.89%
Total	<u>\$2,138,900</u>	<u>\$60,842,565</u>	3.52%

Table 2

##### **Amount Surcharged (Refunded) 1996 - 1999**

	<u>Residential</u>	<u>Commercial</u>	<u>Total Surcharge/Refund</u>
11/96-4/97	\$ 710,295	365,777	\$1,076,072
11/97-4/98	341,642	160,542	502,184
11/98-4/99	<u>1,451,572</u>	<u>687,328</u>	<u>2,138,900</u>
Total	<u>\$2,503,509</u>	<u>\$1,213,647</u>	<u>\$3,717,156</u>

**V. BACKGROUND INFORMATION ON THE COMPANY**

United Cities Gas Company (UCG), with its principal office at 810 Crescent Centre Drive, Franklin, Tennessee, is a division of Atmos Energy Corporation, located in Dallas, Texas. UCG is a multi-state gas distributor, providing service to several communities in Tennessee. The gas to serve these areas is delivered by four natural gas pipelines in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission. The four interstate pipelines are East Tennessee Natural Gas (ETNG), Texas Eastern Transmission Corporation (TETC), Columbia Gulf Transmission Corporation (CGTC), and Texas Gas Transmission Corporation (TGTC).

ETNG provides service to UCG in Tennessee for the Columbia, Shelbyville, Lynchburg, Maryville-Alcoa, Morristown, Bristol, Elizabethton, Gray, Greeneville, Johnson City, and Kingsport areas.

TETC and CGTC provide service to UCG in Tennessee for Murfreesboro, Nolensville, Franklin, and adjacent areas in Rutherford and Williamson Counties.

TGTC provides service to UCG in Tennessee to Union City and adjacent areas in Obion County.

## **VI. WNA FINDINGS**

The Staff's audit results showed a net **underrecovery** from UCG's ratepayers in the amount of **\$2,018**. This underrecovery resulted from three findings, which are summarized below.

### **SUMMARY:**

<b>FINDING #1</b>	<b>Inaccurate Actual Heating Degree Days</b>	<b>\$11,024</b>	<b>Underrecovery</b>
<b>FINDING #2</b>	<b>Normal Heating Degree Days overstated</b>	<b>5,033</b>	<b>Overrecovery</b>
<b>FINDING #3</b>	<b>No WNA Adjustment for some customers</b>	<b><u>3,973</u></b>	<b>Overrecovery</b>
	<b>NET RESULT</b>	<b><u>\$2,018</u></b>	<b>Underrecovery</b>



The net result of the Company's use of this inaccurate information is that the customers were **undercharged \$11,024.36.**

**Company Response**

The difference in degree days is a result of human error. The weather stations are contacted each day and the results input into a database. It is very possible that the numbers could have been input incorrectly over the period of several months resulting in the 11 degree days difference.

## **FINDING #2:**

### **Exception**

The normal heating degree days were overstated.

### **Discussion**

For all customers in Johnson City with read dates of January 4, 1999 and January 5, 1999, the cumulative normal degree days used to calculate the WNA adjustments were overstated by 90 degree days. It appears that the majority of these customers fell on cycles 20 and 22 in December, 1998.

The net result of the Company's use of inaccurate normal degree days is that the customers were **overcharged \$5,033**.

### **Company Response**

The Gas Controller inserted a line in the spreadsheet on January 3, 4 and 5 adding the Normal Degree Days and the Actual Degree Days, but did not delete the dates that had been inserted; therefore, the Normal Degree Days were overstated by 90. This error was corrected on January 6.

United Cities will be switching billing systems before the 1999/2000 WNA period and a safeguard to prevent this from happening in the future is being researched.

### **FINDING #3:**

#### **Exception**

There were no WNA Adjustments billed to some customers in Morristown.

#### **Discussion**

For April, 1999, cycle one, the Company showed zero actual heating degree days and zero normal heating degree days for the majority of customers. Since there were no heating degree days, the Company's WNA formula calculated a zero WNA adjustment for these customers, when in fact, they should have had a credit adjustment based on the correct actual and normal heating degree days.

The net result of the Company's use of this inaccurate information was that the customers were **overcharged \$3,973**.

#### **Company Response**

The revenue month for Cycle 1 in Morristown was input to the billing system as a summer month (a non WNA month). The billing system automatically recognized the WNA calculation should not be performed. This error was not corrected until later in the billing cycle.

## **VII. RECOMMENDATIONS AND CONCLUSIONS**

The Staff concludes that, except for the above findings, the Company is correctly implementing the mechanics of the WNA Rider as specified by the TRA and included in the Company's tariff. (See Attachment 1) Since the amount of undercollection is immaterial (approximately \$0.02 per customer), we recommend that the Company include this underrecovery in its next Refund Due Customers filing with the TRA. This is the method the Company has customarily used.

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER

Provisions for Adjustment

The base rate per therm/Ccf (100,000 Btu) for gas service set forth in any Rate Schedules utilized by the Tennessee Regulatory Authority in determining normalized test period revenues shall be adjusted by an amount hereinafter described, which amount is referred to as the "Weather Normalization Adjustment." The Weather Normalization Adjustment shall apply to all residential and commercial bills based on meters read during the revenue months of November through April.

Definitions

For purpose of this Rider:

"Regulatory Authority" means the Tennessee Regulatory Authority

"Relevant Rate Order" means the final order of the Regulatory Authority in the most recent litigated rate case of the Company fixing the rates of the Company or the most recent final order of the Regulatory Authority specifically prescribing or fixing the factors and procedures to be used in the application of this Rider.

Computation of Weather Normalization Adjustment

The Weather Normalization Adjustment shall be computed to the nearest one-hundredth cent per therm/Ccf by the following formula:

$$WNA_i = R_i \frac{(HSF_i (NDD-ADD))}{(BL_i + (HSF_i \times ADD))}$$

Where

$i$  = any particular Rate Schedule or billing classification within any such particular Rate Schedule that contains more than one billing classification

$WNA_i$  = Weather Normalization Adjustment Factor for the  $i^{th}$  rate schedule or classification expressed in cents per therm/Ccf

$R_i$  = weighted average base rate of temperature sensitive sales for the  $i^{th}$  schedule or classification utilized by the Tennessee Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

Issued by: Thomas R. Blose, Jr., President  
Date Issued: August 1, 1997  
Issued Pursuant to Docket No. 96-01299

Effective Date: September 2, 1997

WEATHER NORMALIZATION ADJUSTMENT (WNA) RIDER (Continued)

- HSF<sub>i</sub> = heat sensitive factor for the i<sup>th</sup> schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
- NDD = normal billing cycle heating degree days utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues
- ADD = actual billing cycle heating degree days
- BL<sub>i</sub> = base load sales for the i<sup>th</sup> schedule or classification utilized by the Regulatory Authority in the Relevant Rate Order for the purpose of determining normalized test year revenues

Filing with Regulatory Authority

The Company will file as directed by the Regulatory Authority (a) a copy of each computation of the Weather Normalization Adjustment, (b) a schedule showing the effective date of each such Weather Normalization Adjustment, and (c) a schedule showing the factors or values derived from the Relevant Rate Order used in calculating such Weather Normalization Adjustment.

Heat Use/Base Use Factors

<u>Town</u>	<u>Residential</u>		<u>Commercial</u>	
	<u>Base use Ccf</u>	<u>Heat use Ccf/HDD</u>	<u>Base use Ccf</u>	<u>Heat use Ccf/HDD</u>
Union City	13.906292	.156369	124.595029	.453633
Columbia Shelbyville Franklin Murfreesboro	13.035323	.173948	99.021858	.624513
Maryville Morristown	13.886330	.153366	111.454966	.658649
Johnson City Elizabethton Kingsport Greeneville Bristol	10.696903	.162066	169.773651	.611201

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